



INTEGRATED  
Environmental Services, Inc.

# 350

March 24, 2000

Mr. John Geroch  
Associate engineering Geologist  
Regional Water Quality control Board  
Los Angeles Region  
320 W. 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

**Subject: Workplan for Delineating Potential Impacts of the VOC Plume in Parcel C on Parcel B and Groundwater Monitoring and Sampling Plan for the Boeing Realty Corporation C-6 Facility 19503 south Normandie Avenue, Los Angeles (SLIC No. 410)**

Dear Mr. Geroch:

This letter is in response to Regional Water Quality Control Board (RWQCB) correspondence of March 16, 2000 requesting a workplan for delineating potential impacts of the VOC plume in Parcel B on Parcel C and groundwater monitoring and sampling plan (SAP) for the Boeing Realty Corporation C-6 facility.

As presented in our March 6<sup>th</sup> letter to your office, site-wide groundwater monitoring activities have been conducted on the site (five monitoring events from July 1998 to July 1999). The following table presents a summary of the events and the contractors who conducted the work.

#### WELL SAMPLING EVENTS

Well Numbers	July 98	September 98	October 98	March 99	July 99
WCC-3S to WCC-12S, and WCC-3D		√(HLA)	√(HLA)	√(KJ)	√(KJ)
TMW-1 to TMW-9	√(KJ)	√(HLA)	√(HLA)	√(KJ)	√(KJ)
TMW-10 to TMW-17				√(KJ)*	√(KJ)
BL-1 to BL-8				√(HLA)	√(AGM)
DAC-P1				√(KJ)**	√(KJ)

\* Well TMW-17 was installed and sampled in May 99

\*\* Well DAC-P1 was sampled in April 99

AGM Sampled by ARCADIS Geraghty & Miller

HLA Sampled by Harding Lawson Associates

KJ Sampled by Kennedy Jenks Consultants



Boeing has recently received the BL-well groundwater results from subcontractors working on the International Light Metals property. The well sampling events summarized above delineated site-wide groundwater conditions. The reports for these monitoring activities will be forwarded to you by April 10, 2000. Integrated is in the process of preparing the site wide groundwater report from the assimilated data. The SAP is in the process of being prepared after a thorough review of the site-wide data. Based on this review, a conceptual SAP is presented in the attached figure and table. Boeing would be pleased to meet with the RWQCB to discuss the SAP at your convenience. The detailed SAP will be finalized upon review and evaluation of the contractor's reports and a review of the plan with Boeing. This is anticipated to be completed and submitted to your office by April 10, 2000.

Please kindly add Mr. Steve Shestag to the distribution list on all future correspondence. His address is:

Steve Shestag, R.G., C.E.G.  
Manager, Environmental Remediation, Safety, Health & Environmental Affairs  
Rocketdyne Propulsion and Power The Boeing Company  
6633 Canoga Avenue, MC T-487  
P.O. Box 7322 Canoga Park, CA 91303-7922

If you have any questions please do not hesitate to call Derrick Willis at (949) 609-3290 ext. 103 or Steve Shestag at (818) 586-6014. Thank you for the guidance and support you and your team have provided and continue to provide to this important project.

Sincerely yours,

Derrick Willis  
Director of Operations

Cc: Rebecca Chou, Ph.D., P.E.  
Mario Stavale, BRC  
Steve Shestag, BRC  
Michael Young, Integrated

Attachments

# GROUNDWATER SAMPLING AND ANALYSIS SUMMARY

WELL ID.	DATE CONSTRUCTED	TOTAL DEPTH OF BOREHOLE (FEET)	DEPTH OF SLOTTED INTERVAL (FEET BGS)	HYDROGEOLOGIC UNIT SLOTTED	MONITORING FREQUENCY	ANALYTICAL METHOD
BL-3	2/8/99	82	62-82	Bellflower Aquitard	Quarterly	VOCs; EPA Method 8260
DAC-P1	9/25/89	91.5	60-90	Bellflower Aquitard	Quarterly	VOCs; EPA Method 8260 TPH, EPA Method 8015M
TMW-2	6/28/98	87	62-82	Bellflower Aquitard	Quarterly	VOCs; EPA Method 8260 MNA*
TMW-3	7/21/98	87	62.5-82.5	Bellflower Aquitard	Quarterly	VOCs; EPA Method 8260 MNA*
TMW-4	6/30/98	86	60-80	Bellflower Aquitard	Quarterly	VOCs; EPA Method 8260 MNA*
TMW-5	7/2/98	86	61.3-81.3	Bellflower Aquitard	Quarterly	VOCs; EPA Method 8260
TMW-10	1/28/99	85	60.5-80.5	Bellflower Aquitard	Quarterly	VOC; EPA Method 8260
TMW-12	1/27/99	88	62-82	Bellflower Aquitard	Quarterly	VOC; EPA Method 8260 MNA*
TMW-14	2/3/99	90	65-85	Bellflower Aquitard	Quarterly	VOC; EPA Method 8260 MNA*

### GROUNDWATER SAMPLING AND ANALYSIS SUMMARY (CONTINUED)

WELL ID.	DATE CONSTRUCTED	TOTAL DEPTH OF BOREHOLE (FEET)	DEPTH OF SLOTTED INTERVAL (Feet bgs)	HYDROGEOLOGIC UNIT SLOTTED	MONITORING FREQUENCY	ANALYTICAL METHOD
TMW-15	2/4/99	92	62-87	Bellflower Aquitard	Quarterly	VOC; EPA Method 8260 MNA*
TMW-16	1/29/99	82.5	56.5-76.5	Bellflower Aquitard	Quarterly	VOC; EPA Method 8260 MNA*
WCC-5S	11/24/87	91	60.5-91	Bellflower Aquitard	Quarterly	VOC; EPA Method 8260 MNA*
WCC-10S	6/7/89	90.8	60-90	Bellflower Aquitard	Semi-Annual	VOCs; EPA Method 8260 THP, EPA Method 8015M
WCC-11S	9/12/90	91	61-90	Bellflower Aquitard	Semi-Annual	VOC; EPA METHOD 8260 MNA*

ASTM  
bgs  
EPA  
GC/FID  
MNA  
TPH

American Society for Testing Materials  
Below ground surface  
Environmental Protection Agency  
Gas Chromatography/Flame Ionization detector  
Monitored natural attenuation  
Total petroleum hydrocarbons

\*Monitored Natural Attenuation Parameters include:

- |                         |                        |
|-------------------------|------------------------|
| • VOCs                  | EPA Method 8260        |
| • Carbon dioxide        | ASTM Standard D1946    |
| • Dissolved oxygen      | Not Applicable         |
| • Nitrate               | EPA Method 353.3       |
| • Sulfate               | EPA Method 375.4       |
| • Iron (I)              | EPA Method 6010        |
| • Methane/Ethane/Ethene | EPA Method 18 (GC/FID) |
| • Redox potential       | Field Measurement      |

